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**[54] AIR CLEANING DEVICE AND FLUORESCENT LAMP FOR PHOTOCATALYST**

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[51] Int. Cl.<sup>7</sup> A61L00900; A61L00920; H01J06144**[57] ABSTRACT**

**PROBLEM TO BE SOLVED:** To obtain a sterilization effect and a high deodorization effect with an air cleaning device.

**SOLUTION:** The air flowing in a sterilization space 9 is irradiated with UV rays mainly of a wavelength of 254 nm radiated from a fluorescent lamp 3 by which the sterilization of this air is executed. Further, a phosphor 6 is irradiated with the UV rays mainly of the wavelength of 254 nm radiated from the fluorescent lamp 3, by which the UV rays are converted to the UV rays of the wavelength of 300 to 400 nm. The photocatalyst 7 is irradiated with the UV rays of the wavelength of 300 to 400 nm. Since the UV rays of the wavelength of 300 to 400 nm have the nature to intrude into the inside of the photocatalyst 7, the photocatalyst 7 is activated not only in the surface part but also in the inside and the air deodorization effect by the photocatalyst 7 enlarged in the activated region is enhanced.

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